

CALL FOR PAPERS

Emerging Smart Data Applications in New Power Systems (ESDPS 2022)

in conjunction with the 8th IEEE International Conference on Smart Data (SmartData 2022)
August 22 - 25, 2022, Espoo, Finland

Aims and Scope

Today, power systems around the world are undergoing significant changes to meet the trends and requirements of low carbon and sustainable development. In particular, the increasing availability and grid-connection of renewable energy sources poses many challenges in terms of the electrical energy production, storage, transmission and usage, such as the random and fluctuating nature of renewable energy, the secure and reliable long distance power transmission, the efficient and dynamic power distribution, etc. To target these issues, smart/big data are considered as an essential technology which can facilitate the smart grid and global energy interconnections in various aspects. Hence, studying the emerging data technology and their application to the power systems is of great interests.. The goal of this workshop is to bring together leading researchers and developers from both industry and academia to discuss and present their views on the latest smart data applications in the new power systems to embrace the “Internet of energy” era.

Topics of Interest

The topics include, but not limited to the following:

- Smart/big data-driven renewable power generation and storage;
- Smart/big data-based condition monitoring for key power transmission and distribution equipment;
- Data sensing, extraction, and fusion applications in power systems;
- Machine Learning applications in new power systems and energy internet;
- Smart/big data-driven power consumption prediction;
- Smart/big data-driven prediction power-line state, environment;
- Data collection, transformation and transmissions in power systems;
- Efficient data fusion Strategy in power systems;
- New power systems architecture and infrastructure design;
- Smart/big data-driven decentralized learning and Cloud/Cluster/Fog/Edge Computing in new power systems;
- Smart/big data-driven algorithms promoting the performance of existing power systems, i.e., capacity increasing, load balancing and so on;
- The integration of renewable and internet information technology.

Submission Instructions:

The submission link: <https://edas.info/N29463>.

The proceedings of the SmartData2022 Workshops will be published by IEEE (IEEE-DL and EI indexed) and will be made available to all conference registrants on site.

A workshop submission in PDF is limited to 6 pages following the IEEE proceedings format (or up to 8 pages with an additional charge for extra pages), including tables, figures, references and appendices.

Important dates:

Due date for submissions: April 15, 2022

Notification of decision to authors: June 10, 2022

Camera-ready of accepted papers: June 25, 2022

Workshop: August 22-25, 2022

Chairs:

- Prof. Jianwei Zhang: University of Hamburg, Germany
- Dr. Qinwei He:, Global Energy Interconnection Research Institute (GEIRI) Europe